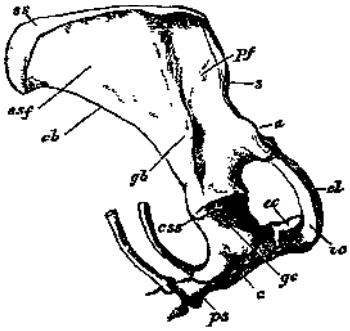

p. 109) are characteristic of the group, and the latter bone is peculiar to the Monotremata among mammals. So, too, is the large coracoid. In the scapula there is a spine which coincides with the anterior border of that bone. The arrangement of the muscles in this region proves conclusively that this projection is the homologue of the spine and the acromion of other mammals. Here, again, we have a point of likeness to the Cetacea.[1] In the pelvis the acetabulum is perforate (in *JScJiidna),* as in Sauropsida.

Considering the numerous very archaic features which the general structure of this group displays, it is surprising to find how typically mammalian they are in certain other peculiarities. The mammalian diaphragm, one of the distinguishing features of the class, is perfectly

normal in the Monotremata. The alimentary canal shows no great divergences from the normal structure. The Stomach is almost globular, With

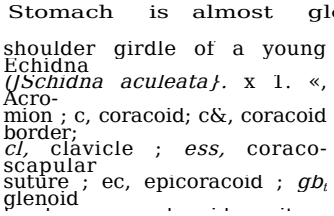

FIG. 52,—Side view of right half of the shoulder girdle of a young Echidna (*JSchidna aculeata}*. x 1. «, Acromion ; c, coracoid; c&, coracoid border; *cl,* clavicle ; *ess,* coracoscapular suture ; ec, epicoracoid ; *gb,* glenoid

a projecting pyloric region in *Ornithorhync7ius;* the intestine is divided into a " small" and " large" intestine by a slender caecum. The liver has the subdivisions that this organ usually shows in the Mammalia. However, the presence of the ventral mesentery and of the abdominal vein in *JBchidna* and *OrnitJiorhynchus* has already been mentioned as a distinctive character. The peculiar and apparently partly primitive valve of the right ventricle has been described above (see p. 66). The brain is in most respects mammalian in its characters, but naturally shows some important differences. Dr. Elliot Smith, who has most recently studied this question,[2] is of opinion that the size of the cerebral hemispheres is not at all reptilian ; indeed, it " greatly exceeds that of

[1] Muscular insertions and attachments do not, however, altogether support the comparison.

[2] *Joum* Anat. fhys.* 1899, p. 309.